

REMARKS

Applicants respectfully request reconsideration and allowance of the subject application. Claims 1-22 are pending in the application.

Claim Rejection under 35 U.S.C. § 103

Claims 1-3 and 9-20 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of the combination of U.S. Patent No. 6,687,020 to Hanagami and U.S. Patent No. 6,208,770 to Gilman. Applicants respectfully traverse the rejection of Claims 1-3 and 9-20.

The Hanagami Reference

The Hanagami reference discloses a video processing apparatus that prints a picture having an arbitrarily selected size without forging an original picture. That is, Hanagami discloses a way to print a photo of the selected size by using video data in such a way that interpolation-type processes are not required. Thus, the printed photo is more accurate, not resulting from data produced by “decimating processing” (e.g. interpolation). (See Hanagami, Abstract.)

In operation, Hanagami allows the user to select an arbitrary print size using a selecting means 51, and to adjust a picture frame accordingly (see FIG. 2). The selected picture size may be manually input by entering X- and Y-

coordinate dimensions (col. 8, lines 30-35) or may be selected from among sizes associated with required passport photo dimensions of different countries (col. 8, lines 36-43). Thus, for each object that is imaged and printed, the Hanagami reference teaches that the user selects the print size and that the user only selects a single print size.

It is a significant core aspect of Hanagami that a CPU 43 is configured to determine the number of pixels of a video data corresponding to the selected print size. Additionally, a memory controller 33 is configured to process the video data so that the number of pixels of video data output from a camera is in one-to-one correspondence with pixels of a video data to be printed by the printer. (See the Abstract and other locations.)

Significantly, Hanagami has discovered how to control aspects of reading video data to result in the desired one-to-one correspondence. (See column 19, lines 36-49.) In large part, Hanagami controls the read sampling frequency (column 19, line 59 to column 20, line 34) in conjunction with aspects of the paper feed pitch (column 19, line 61) to correspond the video data to the print size.

Thus, having picked the size of the printed image (typically by entering the size directly or picking the required passport photo size of the appropriate country) the video data is processed by Hanagami's disclosure so that a one-to-one correspondence between pixels of a video data and the data sent to the

printer. Accordingly, Hanagami avoids distortion of interpolation and similar processes wherein data may be “forged” (Hanagami’s term) to fit the desired picture size. (See Hanagami, Abstract and other locations.)

It is instructive to note that the Applicant’s claims recite “receiving an image” and “calculating a range of image sizes.” In contrast, Hanagami starts by arbitrarily selecting the image size (Abstract, line 3), and then “controls the read sampling frequency” “in response to the print size selected” (column 20, lines 2-4) to get the “one-to-one” pixel “correspondence” (column 19, line 45). Thus, Hanagami takes a quite different approach.

The Gilman Reference

The Gilman reference discloses an image processing technique that includes color adjusting a scanned digital image prior to being transferred to a storage medium. The color adjusted image is stored along with “enabling printing software.” Once a user has selected a number of stored images for printing, the software prepares the print layout by calculating an image size which enables the selected number of images to fit on a page. In particular, the program calculates the number of selected images in vertical and horizontal directions, and calculates the size of the selected images in the vertical and horizontal direction to cause “white space” to separate the selected images. Thus, for each set of image data selected to fill a page, the Gilman reference teaches that a single image size is calculated.

Claims 1-3 and 9-11

Claim 1 recites a method for selecting a printed image size that includes:

- receiving an image;
- calculating a range of image sizes for printing said image based on a plurality of factors; and
- selecting at least one of said image sizes in said range for printing said image.

Gilman does not disclose “calculating a range of image sizes.” Instead, Gilman discloses preparing the print layout by calculating the image size which enables the selected number of images to fit on a page. Accordingly, those skilled in the art appreciated that Gilman determines a single image size for printing a number of images on a page.

The Office refers to Gilman at col. 6, lines 19-34 to support the assertion that Gilman teaches “calculating a range of image sizes for printing said image based on a plurality of factors.”

The Applicants respectfully disagree with the Office’s position, and suggest that the relied upon passages do not support the Office’s assertion. In particular, Gilman discloses that “the program prepares the print layout by calculating the image size which enables the selected number of images to fit on a page.” Therefore,

Gilman teaches calculating a single image size for printing a number of images together on a page. In addition, Applicants have examined the Gilman reference in detail and can find no description or suggestion therein of calculating a number of image sizes for printing each image. Instead, the Gilman reference only refers to “the image size” in the singular form.

Thus, neither Hanagami nor Gilman teach or suggest “calculating a range of image sizes for printing said image.” Applicants therefore respectfully submit that Claim 1 is patentable over Hanagami, Gilman and the combination thereof. Accordingly, Applicants respectfully request that the §103(a) rejection of Claim 1 be withdrawn and Claim 1 be allowed.

Dependent Claim 2, 3 and 9-11 are allowable by virtue of their dependency on respective base Claim 1, as well as the additional elements they recite. Accordingly, Applicants respectfully request that the §103(a) rejection of Claims 2, 3 and 9-11 be withdrawn and Claims 2, 3 and 9-11 be allowed.

Claims 12-16

Claim 12 recites a method for printing an image that includes:

- receiving an image;
- calculating a range of image sizes for printing said image based on a plurality of factors; and

- printing said image in a size in said range.

Hanagami does not disclose “calculating a range of image sizes.” Instead, Hanagami discloses that a user selects a single image size for printing. Having received the image size selected by the user, Hanagami generates a printed image having a one-to-one pixel relationship with the pixels in the video image of the selected size.

The Office refers to Hanagami at col. 6, line 27 through col. 8, line 53 and col. 19, line 59 through col. 20, line 34 to support the assertion that Hanagami teaches “a method for printing an image comprising steps of: receiving an image; calculating a range of image sizes for printing said image based on a plurality of factors; and printing said image in a size in said range.”

The Applicants respectfully disagree, In fact, in the rejection of Claim 1, the Office admits that Hanagami does not teach or suggest “calculating a range of image sizes for printing said image based on a plurality of factors.” Accordingly, the rejection of Claims 1 and 12 are contradictory.

Furthermore, the Applicants respectfully disagree with the Office’s position, and suggest that the relied upon passages do not support the Office’s assertion. In particular, Hanagami does not teach or suggest “calculating a range of image sizes for printing the image based on a plurality of factors.” Instead, Hanagami discloses that a user selects a single image size for printing (col. 7, lines 9-11; col. 19, line 67 through

col. 20, line 1). The image size is selected without calculating image sizes. Furthermore, the image size is selected without performing a calculation based on a plurality of factors.

Applicants also respectfully assert that Gilman does not teach or disclose “calculating a range of image sizes for printing said image based on a plurality of factors,” as asserted with respect to Claim 1. Instead, Gilman discloses that “the program prepares the print layout by calculating the image size which enables the selected number of images to fit on a page.” Therefore, Gilman teaches calculating a single image size for printing a number of images together on a page. In addition, Applicants have examined the Gilman reference in detail and can find no description or suggestion therein of calculating a number of image sizes for printing each image. Instead, the Gilman reference only refers to “the image size” in the singular form.

Thus, neither Hanagami, Gilman nor the combination thereof, teach or suggest “calculating a range of image sizes for printing said image.” Applicants therefore respectfully submit that Claim 12 is patentable over Hanagami, Gilman and the combination thereof. Accordingly, Applicants respectfully request that the §103(a) rejection of Claim 12 be withdrawn and Claim 12 be allowed.

Dependent Claim 13-16 are allowable by virtue of their dependency on respective base Claim 12, as well as the additional elements they recite. Accordingly, Applicants respectfully request that the §103(a) rejection of Claims 13-16 be withdrawn and Claims 13-16 be allowed.

Claims 17-20

Claim 17 recites a system operable to select an image size for printing an image, wherein the system includes:

- at least one interface operable to receive said image;
- a processor operable to calculate a range of image sizes for printing said image based on a plurality of factors; and
- a printer operable to print said image in a size in said range.

Hanagami does not disclose “a processor operable to calculate a range of image sizes.” Instead, Hanagmai discloses that a user selects a single image size for printing. Having received the image size selected by the user, Hanagami generates a printed image having a one-to-one pixel relationship with the pixels in the video image of the selected size.

The Office refers to Hanagami at col. 6, line 27 through col. 8, line 53 and col. 19, line 59 through col. 20, line 34 to support the assertion that Hanagami teaches “a method for printing an image comprising steps of: receiving an image; calculating a range of image sizes for printing said image based on a plurality of factors; and printing said image in a size in said range.”

The Applicants respectfully disagree. In fact, in the rejection of Claim 1, the Office admits that Hanagami does not teach or suggest “calculating a range of image

sizes for printing said image based on a plurality of factors.” Accordingly, the rejection of Claim 1 and 17 are contradictory.

Furthermore, the Applicants respectfully disagree with the Office’s position, and suggest that the relied upon passages do not support the Office’s assertion. In particular, Hanagami does not teach or suggest “a processor operable to calculate a range of image sizes for printing the image based on a plurality of factors.” Instead, Hanagami discloses that a user selects a single image size for printing (col. 7, lines 9-11; col. 19, line 67 through col. 20, line 1). The image size is selected without calculating image sizes. In addition, the image size is selected without performing a calculation based on a plurality of factors.

Applicants also respectfully assert that Gilman does not teach or disclose “a processor operable to calculate a range of image sizes for printing said image based on a plurality of factors,” as asserted with respect to Claim 1. Instead, Gilman discloses that “the program prepares the print layout by calculating the image size which enables the selected number of images to fit on a page.” Therefore, Gilman teaches calculating a single image size for printing a number of images together on a page. In addition, Applicants have examined the Gilman reference in detail and can find no description or suggestion therein of calculating a number of image sizes for each image printed. Instead, the Gilman reference only refers to “the image size” in the singular form.

Thus, neither Hanagami, Gilman nor the combination thereof, teach or suggest “a processor operable to calculate a range of image sizes for printing said image.” Applicants therefore respectfully submit that Claim 17 is patentable over Hanagami, Gilman and the combination thereof. Accordingly, Applicants respectfully request that the §103(a) rejection of Claim 17 be withdrawn and Claim 17 be allowed.

Dependent Claim 18-20 are allowable by virtue of their dependency on respective base Claim 17, as well as the additional elements they recite. Accordingly, Applicants respectfully request that the §103(a) rejection of Claims 18-20 be withdrawn and Claims 18-20 be allowed.

Claims 4-8, 21 and 22 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of the combination of U.S. Patent No. 6,687,020 to Hanagami, U.S. Patent No. 6,208,770 to Gilman and U.S. Patent No. 6,587,221 to Young. Applicants respectfully traverse the rejection of Claims 4-8, 21 and 22.

The Young Reference

The Young reference teaches a technique of scanning an image according to selected scanning parameters and printing the scanned image according to selected printing parameters (col. 11, lines 61-65). Prior to scanning, the user selects the printer on which the image will be printed, selects the size of the printed image and selects the number of primary colors to be used to print the image (col. 11, lines 31-35). The printing parameters, such as the resolution of the printer, the number of

primary colors supported by the printer and the number of different colors levels supported by the printer, are then determined (col. 11, lines 35-41). The user then selects the whole or a portion of the image to be scanned (col. 11, lines 44-47). The scanning parameters are then determined based upon the printing parameters, the selected printed image size and the selected size of the image to be scanned (col. 11, lines 48-60). The image is then scanned and printed (col. 11, lines 61-65). For each image scanned and printed, the Young reference teaches that the user selects a single printed image size.

Claims 4-8

Claim 4 recites a method of Claim 1, wherein the step of calculating further comprises steps of:

- determining an aspect ration of said image; and
- calculating said range, whereby an image printed in each of said sizes in said range has an aspect ratio approximately equal to an aspect ration of said received image.

As discussed above, the Hanagami and Gilman references fail to teach or suggest the elements of Claim 1. Additionally, the Young reference also fails to disclose the elements of Claim 1. In particular, Young does not teach or suggest

“calculating a range of image sizes for printing said image based on a plurality of factors.”

Instead, the Young reference teaches that the user selects a printed image size (col. 11, lines 33-35). The image is then scanned according to selected scanning parameters and printed in the selected printed image size (col. 11, lines 35-65). Therefore, Young also teaches a single image size for printing is selected by the user. In addition, the Applicants have examined the Young reference in detail and can find no description or suggestion therein of selecting more than one image size for each image scanned and printed. Instead, the Young reference only refers to “the printed image size” in the singular form.

The Patent Office does not suggest that Young discloses, and Young does not disclose, “calculating a range of image sizes for printing said image based on a plurality of factors.” Thus, the Young reference fails to remedy the deficient teachings of Hanagami and Gilman. Applicants therefore respectfully submit that Claim 4 is patentable over Hanagami, Gilman, Young and the combination thereof. Accordingly, Applicants respectfully request that the §103(a) rejection of Claim 4 be withdrawn and Claim 4 be allowed.

Claims 5-8 are allowable by virtue of their dependency on Claim 4, as well as the additional elements they recite. Accordingly, Applicants respectfully request that the §103(a) rejection of Claims 5-8 be withdrawn and Claims 5-8 be allowed.

Claims 21 and 22

Claim 21 recites a system of Claim 17, wherein said interface includes a network interface. As discussed above, the Hanagami and Gilman references fail to teach or suggest the elements of Claim 17. Additionally, the Young reference also fails to disclose the elements of Claim 17. In particular, neither Hanagami, Gilman nor Young teach or suggest “a processor operable to calculate a range of image sizes for printing said image based on a plurality of factors.”

Instead, the Young reference teaches that the user selects a printed image size (col. 11, lines 33-35). The image is then scanned according to selected scanning parameters and printed in the selected printed image size (col. 11, lines 35-65). Therefore, Young also teaches a single image size for printing is selected by the user. In addition, the Applicants have examined the Young reference in detail and can find no description or suggestion therein of selecting more than one image size for each image scanned and printed. Instead, the Young reference only refers to “the printed image size” in the singular form.

Thus, the Young reference fails to remedy the deficient teachings of Hanagami and Gilman. Applicants therefore respectfully submit that Claim 21 is patentable over Hanagami, Gilman, Young and the combination thereof. Accordingly, Applicants respectfully request that the §103(a) rejection of Claim 21 be withdrawn and Claim 21 be allowed.

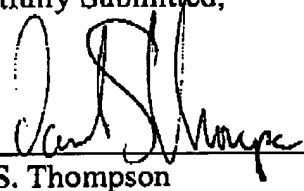
Claim 22 is allowable by virtue of its dependency on Claim 21, as well as the additional elements it recites. Accordingly, Applicants respectfully request that the §103(a) rejection of Claim 22 be withdrawn and Claim 22 be allowed

Conclusion

Claims 1-22 are in condition for allowance. Applicant respectfully requests prompt allowance of the subject application. If any issue remains unresolved that would prevent allowance of this case, the Examiner is requested to contact the undersigned attorney to resolve the issue.

Date: 11-17-05

Respectfully Submitted,

By: 
David S. Thompson
Reg. No. 37,954
Attorney for Applicants

Lee & Hayes, PLLC
421 W. Riverside Avenue, Suite 500
Spokane, Washington 99201
Telephone: (509) 324-9256 ext. 235
Facsimile: (509) 323-8979